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PROGRAMME QUESTIONS: EVALUATION

In-depth evaluation of the major programme on science and technology

Progress report of the Secretary-General

SUMMARY

At its twenty-fourth session, the Committee for Programme and Co-ordination adopted a time table for in-depth evaluations, in which the major programme on science and technology is scheduled for 1992. As requested by the Committee at its twenty-seventh session, in 1987, this progress report contains a review of information and findings already available in United Nations documents and external sources. Particular attention was paid to existing internal and external evaluation reports on aspects of the programme. Methodological proposals on the scope, issues and approach to the evaluation are given in the last section of the report.

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INTRODUCTION

1. At its twenty-fourth session, the Committee for Programme and Co-ordination (CPC) adopted a timetable of in-depth evaluations, 1/ in which an evaluation of the major programme on science and technology was scheduled for 1992. As requested by the Committee at its twenty-seventh session, in 1987, 2/ the present progress report contains a review of information and findings already available in United Nations documents and from external sources. Particular attention was paid to existing internal and external evaluation reports on aspects of the programme. Methodological proposals on the evaluation are given in the last section of the report.

I. GOALS AND MANDATES OF UNITED NATIONS PROGRAMMES IN SCIENCE AND TECHNOLOGY

2. The international community has long recognized the crucial role that rational utilization of science and technology can play in the development of all countries, particularly that of developing countries. The role of the United Nations in this endeavour is elaborated in the major programme on science and technology, chapter 20 of the medium-term plan for the period 1984-1989 (extended to 1991). 3/ Chapter 20 consists of seven programmes that seek to support the effective harmonization and co-ordination of the activities of the United Nations system in assisting developing countries strengthen endogenous capacities in science and technology and to support international co-operation in the transfer of technology.

A. Programme 1. Science and technology for development

3. The Vienna Programme of Action on Science and Technology for Development, 4/ adopted by the United Nations Conference on Science and Technology for Development in 1979, reaffirmed the necessity for promoting the linkages between science and technology endeavours and socio-economic concerns. The Vienna Programme of Action established the framework for the review, monitoring and elaboration of the United Nations activities in science and technology for development. The generalized principles and guidelines of the Vienna Programme of Action reflected the prevailing attitudes of the 1970s on policy and on structural aspects of science and technology for development. Its general recommendations were to be interpreted to suit the individual situations and priorities, but evolved based on three major goals:

(a) Strengthening the scientific and technological capacities of developing countries;

(b) Restructuring the existing pattern of international scientific and technological relations;

(c) Strengthening the role of the United Nations system in science and technology and providing increased financial resources.

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4. In its resolution 34/218 of 19 December 1979, in which it endorsed the Vienna Programme of Action, the General Assembly established institutions for its implementation, namely, the Intergovernmental Committee on Science and Technology for Development and, as a first step in long-term arrangements for a Financing System to start in 1982, the Interim Fund for Science and Technology for Development, under the administrative control of the United Nations Development Programme (UNDP) and under the overall policy guidance of the Intergovernmental Committee. The Assembly also requested the Secretary-General to establish as a new, organizationally distinct unit, the Centre for Science and Technology for Development within the United Nations Secretariat, decided that the Director-General for Development and International Economic Co-operation should be responsible for overall co-ordination in science and technology at the secretariat level within the United Nations system, and that the Centre should assist the Director-General in fulfilling the responsibilities assigned to him in the Vienna Programme of Action.

5. In the same resolution, the General Assembly also mandated the Intergovernmental Committee to assist the Assembly in preparing an operational plan for carrying out the Vienna Programme of Action. In 1980, the Committee by resolution I (II), 5/ decided on guidelines for the preparation of the plan and requested the Director-General to submit proposals for a detailed operational plan. In 1982, in resolution I (IV), 6/ the Committee, taking note of the proposals of the Director-General for an operational plan (A/CN.11/23, annex), invited the Member States to comment on these proposals in order to allow the Director-General to propose brief and specific guidelines for the formulation of specific projects and programmes. In the same resolution, the Committee requested the organs, organizations and bodies of the United Nations system to formulate, co-ordinate and harmonize their individual and joint activities in science and technology, taking into account the proposals for an operational plan and to concentrate on the preparation of specific and detailed projects for science and technology in order to strengthen endogenous capacities in the developing countries. At its fifth session, in 1983, the Committee, by resolution 3 (V), 7/ took note of the report of the Director-General (A/CN.11/36, annex), which contained guidelines for the identification of programmes and projects in science and technology, and it proposed that the report should form a basis for the identification of areas in which programmes and projects in science and technology could be developed to meet the needs of individual countries and regions. At the same session, the Committee also considered a report of the Director-General on the joint activities of the United Nations system (A/CN.11/37, annex) and recommended, in decision I (V), 7/ that the proposals for joint activities should serve as a basis for consultation by lead agencies with Member States.

6. The General Assembly, in its resolution 34/218, also mandated the Intergovernmental Committee to assist the Assembly in formulating policy guidelines for the harmonization of policies of the organs, organizations and bodies of the United Nations system in regard to scientific and technological activities, on the basis of the Vienna Programme of Action. The Committee approached issues of harmonization and co-ordination at both intergovernmental and country levels, stressing the development of system-wide policy guidelines and joint inter-agency activities and the desirability of co-ordinating and harmonizing science and

technology activities at the country level as well. In 1987, in a report submitted to the Committee at its ninth session (A/CN.11/84), the Secretary-General reviewed issues and experiences on policy guidelines and noted:

> The process of harmonization and co-ordination is not yet sufficiently integrated into the internal implementation mechanisms of individual entities, such as medium-term plans, programme budgets and activities of funding bodies. The attitude and approach of the organs of the United Nations system and member States has been somewhat ambivalent. On the one hand, the need for harmonization, co-ordination, joint planning and joint programming has been repeatedly and forcefully emphasized. On the other, the products of these efforts (e.g., joint activities) are largely perceived as external to the activities of individual organizations and are expected to be supported from extrabudgetary resources from sources outside the United Nations system. Furthermore, they are assigned low priority. Normally, only projects sponsored directly by individual member States are expected to be financed from the budgetary and extrabudgetary resources of the United Nations system (ibid., para. 52).

7. In paragraph 56 of the same report, the Secretary-General proposed a range of policy guidelines for harmonization of the activities of the United Nations system on the basis of the discussions and recommendations of the ACC task force on science and development. Since 1987, the Task Force on Science and Technology for Development of the Administrative Committee on Co-ordination (ACC) has introduced the following tripartite approach to enhance system-wide co-ordination:

(a) Broad policy guidelines should be formulated to serve as a frame of reference for the organs, organizations and bodies of the United Nations system;

(b) Issues of system-wide importance, such as new and emerging areas of science and technology, should be given greater attention;

(c) The work of the United Nations system at the level of individual countries should be better co-ordinated and of more relevance.

It is expected that such approach would, while respecting the mandates and competences of the organizations and agencies, contribute to the emergence of a more coherent system in science and technology.

8. In 1989, the Intergovernmental Committee established the following basic thrusts of the United Nations system strategy for science and technology for development, which defined the new mandate of the Centre for Science and Technology for Development for the immediate future:

(a) Endogenous capacity-building in science and technology for development at the national level through a dialogue among partners in the development process;

(b) Assessment of new and emerging technologies and their meaning for decision-making and the implementation of initiatives at the regional and country levels;

(c) Co-ordination and harmonization of activities in science and technology for development at the country level through inter-agency missions.

The Committee, in paragraph 2 of its resolution 1 (X) E, 8/ recommended that the General Assembly entrust the Centre, through the Advance Technology Alert System and in co-operation with other United Nations bodies, to serve as the focal point for technological assessment within the United Nations system and, where possible, for relations with Governments and non-governmental organizations concerning technological assessment activities in Member States. That enlarged technology assessment function was also extended to substantive themes. That is, the Committee decided to choose its substantive themes from items of the agenda of the General Assembly with a high science and technology content, and to analyse them through a technology assessment methodology.

9. In order to translate the concept of endogenous capacity-building into operational terms and into the context of a country, the Centre, following the initiative of the ACC Task Force, has launched a programme of implementation in selected countries. The Intergovernmental Committee, at its eighth and ninth sessions, directed the Centre to implement those projects. An important element is consensus building through national dialogues among the stakeholders in the development process. So far, these projects are being implemented in Nepal, Thailand, Jordan and the United Republic of Tanzania. Six more countries have been chosen for the same purpose. Those projects have been facilitated through extrabudgetary resources and it is expected that, upon completion of them, a portfolio of initiatives ranked by priority will emerge in each country, which would be critical to capacity-building. Sufficient empirical and analytical data will also become available with which it would be possible to codify the concept into operational terms for the use and benefit of the other developing countries.

10. The General Assembly, in its resolution 37/244 of 21 December 1982, established the United Nations Financing System for Science and Technology for Development, organized on a universal basis, open to the participation of all States as full members, with a target of core resources of $300 million for the period 1983-1985. In December 1985, the Assembly concluded the resource outlook of the Financing System did not permit the full implementation of the long-term financing and institutional arrangements and decided, in resolution 40/194 of 17 December 1985, that the total resources made available to the Financing System in 1986 should not be less than the average level achieved by the System over the previous three years, which amounted to approximately $10 million. At the end of 1986, the Assembly reviewed the results of pledging for science and technology and decided, in resolution 41/183 of 8 December 1986, to terminate the United Nations Financing System for Science and Technology for Development as at 31 December 1986 and to transfer its responsibilties and resources to an identifiable facility entitled "United Nations Fund for Science and Technology for Development", to be established as a trust fund within UNDP. Both the UNDP Governing Council and the Intergovernmental Committee for Science and Technology for Development 9/ had recommended this course of action to the Assembly. In 1988, the Administrator of UNDP reported to the Governing Council (see DP/1988/47) that core resources allocated through the Fund were shrinking. The Administrator indicated his intention to strengthen the Fund by focusing its activities on two main functions,

namely, a multilateral funding mechanism for science and technology activities and a provider of technical advisory services to UNDP in science, technology and energy matters. In this new arrangement, the Fund would also have within UNDP management responsibilities for short-term advisory services, the Transfer of Knowledge through Expatriate Nationals (TOKTEN) programme and the energy office.

11. In 1984, the Intergovernmental Committee, in its resolution 6 (VI), decided to take a more selective approach that would enable it, at each of its sessions, to conduct deliberations of greater depth by selecting in advance themes for consideration. 10/ The themes selected to date have been a mid-decade review of the Vienna Programme of Action, information systems for science and technology for development, and mobilization of resources for science and technology. At its tenth session in 1989, the Intergovernmental Committee conducted the end of the decade review of the implementation of the Vienna Programme of Action (see paras. 27-30).

12. In its resolutions 44/14 A to E of 26 October 1989, the General Assembly, inter alia:

(a) Reaffirmed the validity of the Vienna Programme of Action, and expressed concern regarding its implementation;

(b) Emphasized that the building by developing countries of endogenous capacity for science and technology was of major concern to the United Nations system;

(c) Called upon the governing bodies of the organizations of the United Nations system, including the United Nations Fund for Science and Technology for Development, to enchance co-ordination and harmonization at the country level.

B. Programme 2. Transfer of technology

13. This programme began as early as 1970 to draw up a conceptual framework for the examination of technology-related issues, including those relating to the acquisition, absorption and generation of technology for development purposes. It was also during this year that the Trade and Development Board established an Ad Hoc Intergovernmental Expert Group on Transfer of Technology which elaborated a programme of work for the United Nations Conference on Trade and Development (UNCTAD), including negotiations of an international code of conduct on transfer of technology. 11/ In 1974, the Trade and Development Board replaced the Ad Hoc Group with the Committee on Transfer of Technology. Since its inception, that Committee has played an important role in establishing a detailed work programme on technology issues for UNCTAD on the basis of the resolutions and decisions adopted by the Conference and by the Trade and Development Board and in providing guidance to the secretariat in its work.

14. While the third session of UNCTAD, in 1972, by resolution 39 (III), 12/ initiated work on improving access to foreign technology and acquiring it on equitable terms and conditions, the fourth session of UNCTAD, in 1976, focused on

technological dependence and ways and means of overcoming it through the strengthening of the technological capacity of the developing countries. That involved issues relating not only to transfer of technology, but also to its absorption, adaptation, development and generation. A number of important measures were adopted aiming at strengthening the technological capacity of developing countries, including promoting technological co-operation among themselves. 13/

15. In resolution 32/188 of 19 December 1977, the General Assembly decided to convene the United Nations Conference on an International Code of Conduct on the Transfer of Technology under the auspices of UNCTAD. Since 1978, six sessions of the Conference have been held, as well as three sessions of an Interim Committee established between the fourth and fifth sessions. Since 1980, the negotiations on the Code have considerably slowed as a result of divergent views on the manner in which restrictive practices in transfer of technology transactions should be treated in an international code. The regional groups also differ in their approach to the applicable law and settlement of disputes with some countries favouring a clearer recognition of the contractural relations and others wishing to stress the observance of all parties of the mandatory rules of the laws of their countries (see TD/CODE/TOT/54, paras. 1-3).

16. Parallel to the work on the code, the Conference, at its fifth session, focused the technology-related discussions on the strengthening of the technological capacity of developing countries, including accelerating their technological transformation. That session of the Conference, by resolution 112 (V) 14/ adopted on 3 June 1979, provided the mandate for the secretariat's work on the formulation of a strategy for the technological transformation of developing countries, as well as on specific areas and sectors of critical importance to developing countries, such as food-processing, capital goods, energy and pharmaceuticals. The sixth session of UNCTAD, by resolution 143 (VI) of 2 July 1983, 15/ provided further impetus to the formulation and implementation of a strategy for the technological transformation of technology of developing countries and decided to convene the first special session of the Committee on Transfer of Technology (13 to 22 February 1984) for review and relevant action on the strategy. Intergovernmental negotiation on the strategy led to the submission by all regional groups and China of written proposals on the subject (see TD/B/986).

17. The intergovernmental consideration of technology issues by the Conference was accompanied by the corresponding activity on the part of the Trade and Development Board and the Committee on Transfer of Technology. The latter has acted as a catalyst in the transition from one phase to another during successive sessions of the Conference. It has also been instrumental in bringing to the forefront of international discussions new policy issues, such as the trade and development implications of new and emerging technologies and the role of technology in structural change. By its resolution 31 (VI) of 13 November 1986, and based on the document TD/B/C.6/136, which discussed the policy implications of some of these technologies for different types of developing countries, the Committee urged the UNCTAD secretariat to continue work in this area. It also mandated the UNCTAD secretariat to continue work on improving the legal environment for the development and transfer of technology and the promotion of technological innovation (see

TD/B/1122). More recently, at its seventh session, the Committee, based on the secretariat document TD/B/C.65/145, undertook a stocktaking and review of the evolution of international technology flows to developing countries, including developmental implications for different types of developing countries (see TD/B/1203).

18. Pursuant to Trade and Development Board resolution 308 (XXX) of 29 March 1985 and Committee resolution 32 (VII) of 2 February 1989, the programme, through its Advisory Service on Transfer of Technology, and drawing on its research and policy analysis functions, has continued to respond to requests for technical co-operation from developing countries, including an in-depth assessment of the special technology problems of the least developed countries. This assessment is a contribution to the Second United Nations Conference on the Least Developed Countries, to be held in Paris in the second half of 1990.

19. UNCTAD, through the transfer of technology programme, has also acted as a forum for intergovernmental discussion on issues arising from the reverse transfer of technology (the "brain-drain"). The mandates in this area were provided by the third, fourth and fifth sessions of the Conference through resolutions 39 (III) of 16 May 1972, 12/ 87 (IV) of 30 May 1976, 13/ and 102 (V) of 30 May 1979. 14/ The General Assembly was also seized with the issue and has played a leading role on the subject since 1967. By its resolutions 37/207 of 20 December 1982 and 38/154 of 19 December 1983, the General Assembly mandated UNCTAD with policy-oriented work on the reverse transfer of technology covering all aspects of the problem, including the magnitude, composition, and direction of the flows of skilled personnel from developing countries to developed countries, as well as policy measures to mitigate the adverse consequences of the phenomenon.

C. Programmes 3 to 7. Regional commissions

20. The United Nations regional commissions have contributed to the continuing international deliberations on science and technology for development and the transfer of technology, and have adopted initiatives within the framework of the Vienna Programme of Action that became the basis of regional strategies and plans of action.

21. In the Economic Commission for Africa (ECA), the Lagos Plan of Action for the Implementation of the Monrovia Strategy for the Economic Development of Africa (A/S-11/14, annex I) constitutes the framework for regional science and technology strategies for science and technology. The Plan identified the following elements: strengthening the science and technology base for development; the development of human resources; the development of infrastructure for science and technology; the provision of science and technology inputs for sector programmes; the mobilization of funds for science and technology at the national level; the strengthening of local production capacity; and the strengthening of the operations of regional and subregional technological institutions. In 1989, the secretariat of ECA in a report on the implementation of the Vienna Programme of Action (SRT/IGCSTD/6/7) to the African Intergovernmental Committee of experts for science and technology for development noted that far too much attention and support for

science and technology from the developed countries to developing countries was concentrated on science and technology policy institution building and policy making. At the country level, the report noted:

> the mandates of the ministries and organizations responsible for science and technology policies are rather too broad and diffuse ..., deal with all aspects of science and technology across all productive and non-productive sectors ... do not have enough personnel with the training and experience in handling science and technico-economic policy issues for development ... . Often too these bodies do not have sufficient funds with which to execute their plans and programmes (ibid., p. 12).

Finally, the report suggested measures for improving the conceptual clarity of science and technology issues, articulating the recommendations of the Vienna Programme of Action, and developing local human resource capabilities for handling science and technology policies.

22. In the Economic Commission for Europe (ECE), the orientation of the science and technology programme is highly selective and has evolved as a result of the efforts by member States to initiate co-operative activities that have broad applications, such as identification and assessment of major trends and perspectives, changes in science and technology policies, and the organization and management of international co-operative research in the transfer of technology.

23. In the Economic Commission for Latin America and the Caribbean (ECLAC), the focus of science and technology activities is on the strengthening of the technological capacity of the countries of the region. The Commission, at its eighteenth and nineteenth sessions, adopted resolutions setting the framework for the Commission's activities in this area. As of 1984, the science and technology activities of ECLAC were linked to its industrial development activities in co-operation with the United Nations Industrial Development Organization (UNIDO). Research on trends in science and technology and their implications for development are also integrated in the Commission's work on regional patterns of development. To this effect, ECLAC has completed a study that presents proposals to transform the regional productive structures and reduce the technological gap within a framework of social equity. In another recent research study to be published soon, the past two decades of experience in science and technology in the region are analysed and compared with the performance of Mediterranean and Asiatic countries.

24. In the Economic and Social Commission for Western Asia (ESCWA), activities in science and technology focus on the development of national technological capabilities, the upgrading of technical skills and managerial talents in science and technology, and the development of policy guidelines to improve the selection and acquisition of imported technology. In 1988, ESCWA convened a regional expert group meeting to review the implementation of the Vienna Programme of Action. The group proposed guidelines for the future orientation of science and technology in the ESCWA region as well as recommendations for action on the integration of technology assessments in the decision-making process, the development of technological services, the consolidation of emerging interest in science and technology, and the creation of national and regional institutional bases for such activities.

25. In the Economic and Social Commission for Asia and the Pacific (ESCAP), science and technology activities include monitoring of technological innovations and assistance to member countries to develop institutional infrastructure for the implementation of science and technology strategies and policies. The Asian and Pacific Centre for the Transfer of Technology, established in 1977, and the Regional Network for Agricultural Machinery are part of the effort to strengthen co-operation among national institutions.

II. CURRENT ORGANIZATION

A. United Nations

26. The medium-term plan for the period 1984-1989 grouped United Nations activities in science and technology into seven programmes: Programme 1, Science and technology for development (CSTD); Programme 2, Transfer of technology (UNCTAD); Programme 3, Science and technology in Africa (ECA); Programme 4, Science and technology in Europe (ECE); Programme 5, Science and technology in Latin America (ECLAC); Programme 6, Science and technology in Western Asia (ESCWA); and Programme 7, Science and technology in Asia and the Pacific (ESCAP). While not included in the major programme, the activities of the United Nations Fund for Science and Technology for Development in UNDP are an important feature of United Nations activities in science and technology.

27. At the intergovernmental level, all seven programmes are reviewed by separate organs. The Intergovernmental Committee reviews Programme 1, Science and technology for development, with the assistance of the Advisory Committee for Science and Technology for Development. The Intergovernmental Committee also provides overall guidelines for the activities of the United Nations Fund for Science and Technology.

28. Programme 2, Transfer of technology, is reviewed by the Committee on the Transfer of Technology, which reports to the Trade and Development Board of UNCTAD.

29. In the regional programmes, in addition to the Commissions themselves, ECA and ESCAP are reviewed by specialized committees and ECE by Senior Advisers. In ECLAC and ESCWA, the Commission itself is the sole review body.

30. The governing bodies, secretariat units and number of Professional posts in those units are summarized in table 1.

31. None of the science and technology programmes of the regional commissions is managed separately, but all are integrated into related programmes such as industrial development or natural resources. However, in 1988-1989 the ESCAP programme attracted $5.5 million in extrabudgetary funding, more than all other programmes combined.

Table 1. Structure and resources of the United Nations science and technology programmes

Programme	Review bodies	Secretariat unit	Number of Professional posts in science and technology programmes 1982 a/	1988-89 b/	1990-91 c/
I. Global					
Programme 1. Science and technology for development	Intergovernmental Committee for Science and Technology for Development Advisory Committee for Science and Technology for Development	Centre for Science and Technology for Development	17	14	14
Programme 2. Transfer of global technology	Committee on Transfer of Technology	Technology Division (UNCTAD)	19	17	16
II. Regional co-operation in science and technology					
Programme 3. ECA	Regional Intergovernmental Committee on Science and Technology	Science and Technology Section, Natural Resources Division (ECA)	4	3	3
Programme 4. ECE	Senior advisers on science and technology	Industry and Technology Division of ECE	4	3	3
Programme 5. ECLAC	Commission	ECLAC/UNIDO Industry/Technology Division	4	1	1
Programme 6. ESCWA	Commission	Natural Resources, Science and Technology Division	4	4	3
Programme 7. ESCAP	Committee on Industry, Technology and Human Settlements	Industry, Human Settlements and Technology Division	4	7 d/	7 d/
		Total	56	49	47

a/ As contained in medium-term plan.

b/ Approved posts, as in 1990-1991 programme budget (A/44/6/Rev.1).

c/ As proposed in 1990-1991 programme budget (A/44/6/Rev.1).

d/ Including one extrabudgetary post.

B. Science and technology in the work of the United Nations system

32. Activities on science and technology are multisectoral as well as sectoral and therefore pervasive in the work programmes of almost all organizations of the United Nations system. As described in the cross-organizational programme analysis on science and technology (E/1987/51), 31 organizational units and agencies reported activities during 1984-1985 in the area of science and technology for development with a total biennial cost of $1,116 million. Expenditures for core activities, defined as those completely and directly related to the objectives of the Vienna Programme, are shown in table 2. The United Nations major programme in science and technology for development accounted for only about 4 per cent of those expenditures.

Table 2. United Nations system: core subprogrammes and technical co-operation projects in science and technology for development: 1984-1985
(Costs in thousands of United States dollars)

	Subprogrammes			Technical co-operation projects		
	Number	Cost	Percentage	Number	Cost	Percentage
1. United Nations						
Major programme a/	25	13 064	3.6	15	8 233	4.3
Other b/	16	7 753	2.2	67	32 441	17.1
2. Specialized agencies						
ILO	10	65 302	18.2	13	1 701	0.9
UNESCO	33	43 579	12.2	95	25 817	13.6
WHO	13	127 205	35.5	40	37 828	19.9
UNIDO	5	18 739	5.2	45	9 294	4.9
Other agencies	64	82 475	23.0	474	74 820	39.4
Total	153	358 117	100.0	749	190 134	100.0

Source: Tables 1 and 3 in E/1987/51.

a/ CSTD, UNCTAD, ECA, ECE, ECLAC, ESCAP, ESCWA.

b/ PSCA, DIESA, DTCD, HABITAT, UNCTC, UNEP, UNITAR, UNU.

33. As is implied by these figures, science and technology activities of the United Nations system are both pervasive and diverse even when limited to core activities. The co-ordination of activities in science and technology by the organizations of the United Nations system is thus an extremely difficult matter. CPC reviewed the cross-organizational programme analysis at its twenty-seventh session. 16/ The main conclusions of CPC on co-ordination in this area are quoted in section III.

34. The Administrative Committee on Co-ordination (ACC), at its April 1989 session, by decision 1989/7, recognized that emphasis in future activities of the United Nations system might usefully be placed on:

(a) Promotion of endogenous capacity-building in order to help Member States, in particular the least developed countries, to identify prioritized activities in science and technology;

(b) Assistance to Member States, at their request, in the development of their technology assessment capacity;

(c) Enhancement of the collective contribution of the United Nations system to the development of endogenous capacity-building of developing countries through technical co-operation activities, including joint inter-agency missions.

III. SURVEY OF AVAILABLE INFORMATION

A. Intergovernmental action and assessments

1. End-of-decade review of the implementation of the Vienna Programme of Action

35. The report of the Secretary-General on the end-of-decade review (A/CN.11/89) noted that the decision of the Intergovernmental Committee to undertake an end-of-decade review of the implementation of the Vienna Programme of Action "reflects its desire to evaluate the extent to which science and technology endeavours have served to fulfil the goals of socio-economic development, particularly in the developing countries. The end-of-decade review is intended to capture the distinctions between those science and technology initiatives that helped to create positive impact and those that did not, in order to stimulate fresh thinking on conceptual and practical orientation for future efforts" (ibid., para. 1).

36. The end-of-decade review involved individual contributions from organizations of the United Nations system and from the ACC Task Force on Science and Technology for Development, reports provided by developing countries summarizing the results of their initiatives in science and technology during the 1980s, and reports provided by developed countries on their experiences in development co-operation. As a part of the preparatory process, a number of meetings were held at the national, regional and international levels with the participation of governmental experts and scientists and technologists, and private and public organizations, including productive enterprises, banks, trade unions and stakeholders. A great

deal of background material is thus available for examination during the course of the in-depth evaluation, including replies to a questionnaire that the Centre submitted to all United Nations entities in the beginning of 1988, inquiring on the progress and constraints encountered by those entities in the implementation of the Vienna Programme of Action, and an impact study of the United Nations activities related to science and technology in a specific country context, which had been prepared for a United Nations inter-agency mission on the improvement of co-ordination at the national level.

37. In the executive summary to his report, the Secretary-General concluded that

> despite a high level of societal awareness of the importance of science and technology for development, brought about by the Conference, the accomplishments during the 1980s have been far short of the objectives sought by the Vienna Programme of Action on Science and Technology for Development, except in a limited number of countries (ibid., executive summary, second paragraph).

38. The Chairman of the Intergovernmental Committee, in his foreword to the report of the Committee on its tenth session, stated that "There was near unanimity that the high aspirations of the Vienna Conference remain largely unfulfilled". 17/ The General Assembly, in its resolution 44/14 A, took note of the Secretary-General's report (A/CN.11/89) and reaffirmed the validity of the Vienna Programme of Action and expressed concern regarding its implementation.

2. Harmonization and co-ordination

39. After reviewing at its twenty-seventh session, in 1987, the report of the Secretary-General (E/1987/51) on the cross-organizational review of the medium-term plans of the organizations of the United Nations system and programme analysis in the area of science and technology for development, CPC drew the following conclusions regarding co-ordination: 18/

(a) More than eight years since the adoption of the Vienna Programme of Action, the Intergovernmental Committee, owing to various circumstances, had been unable to fulfil the co-ordinating role assigned to it under the Vienna Programme of Action and by the General Assembly;

(b) In spite of the existence of the Task Force on Science and Technology of the ACC, co-ordination in that area still needed to be improved;

(c) While the Vienna Programme of Action had been endorsed by the General Assembly and was directly addressed to the United Nations system, most of the medium-term plans and similar documents of the various organizations of the United Nations system did not make explicit reference to the Vienna Programme of Action or relate their activities to the eight programme areas of the operational plan for its implementation.

40. After considering the report of the Secretary-General and the conclusions and recommendations of CPC, the Economic and Social Council adopted resolution 1987/79 of 8 July 1987, in which it urged the Intergovernmental Committee to exercise the co-ordinating role assigned to it under the Vienna Programme of Action.

3. Code of conduct on the transfer of technology

41. As indicated above, since 1978, six sessions of the United Nations Conference on an International Code of Conduct on the Transfer of Technology have been held under the auspices of UNCTAD, and have resulted in significant progress in the elaboration of the draft code. Since 1980, however, the negotiations of the code have considerably slowed down, mainly as a result of divergent views among regional groups on the manner in which restrictive practices in transfer of technology transactions should be treated in an international code, and on the appropriate approach to the applicable law and settlement of disputes, with some countries favouring a clearer recognition of contractual freedom, and others wishing to stress the observance by all parties of the mandatory rules of the laws of their countries.

42. Since the sixth session of the Conference, held in 1985, the Secretary-General of UNCTAD, in pursuance of mandates provided by the General Assembly, has held consultations with regional groups and interested Governments to find appropriate solutions to the issues outstanding in the draft code. Significant efforts have been made by all regional groups and interested Governments to reconcile their different approaches, but no concrete results enjoying general consensus have so far emerged.

43. In 1987, a group of experts was invited, in their personal capacity, to report to the Secretary-General of UNCTAD on the issues outstanding in the negotiations on the code. The experts considered such matters as the changing environment of international transfer of technology (involving a shift in emphasis from control-oriented to encouragement-oriented foreign investment policies and a relaxation of technology transfer regulations) and the role and relevance of the code in these changing conditions from the point of view both of Governments and of the parties to transfer of technology transactions.

44. The experts concluded that important changes were occurring in the field of transfer of technology and in attitudes towards regulation of transfer of technology. Those changes justified a certain shift of emphasis in the negotiation of a code of conduct, but did not alter the desirability of achieving a code.

45. In 1989, the UNCTAD secretariat suggested to member States steps leading to an assessment of the situation by the Secretary-General of UNCTAD and the President of the Conference and its consideration through consultations with regional groups and Governments. A report by the Secretary-General of UNCTAD on those matters will be submitted to the General Assembly at its forty-fifth session so as to enable the Assembly to take appropriate action. The results of the assessment and subsequent consultations would thus become available prior to the completion of the in-depth evaluation.

46. An assessment of the impact of negotiations on the code of conduct would need to take into account their practical and pedagogical effect. Since the start of the negotiations, over 30 countries have adopted legislation and/or policies dealing with technology transfer. This has been due in no small measure to the negotiations; indeed, the relevant legislative texts often show a direct influence from the draft code. The negotiations have also led to a great improvement in general knowledge and consciousness among intellectuals and academics who referred in their work to the international code of conduct on the transfer of technology (see annex II).

4. Reverse transfer of technology

47. Since the third session of the United Nations Conference on Trade and Development, the UNCTAD secretariat has been preparing various studies and servicing a number of meetings of governmental experts on different aspects of this phenomenon, including policy approaches towards alleviating its adverse consequences for the developing countries. The first of these meetings was held as early as February 1978. It was devoted to a wide spectrum of issues, ranging from estimates of outflows of skilled personnel to policy proposals. Four other intergovernmental meetings of experts have been held since then to examine specific aspects of the reverse transfer of technology, including the feasibility of measuring human resource flows, the causes and consequences of the phenomenon and policies to deal with it. The most recent governmental expert meeting was convened pursuant to General Assembly resolution 40/191 of 17 December 1985 and held in Geneva from 14 to 18 March 1988.

48. Although the studies and meetings conducted in UNCTAD have provided policy makers in developing countries with tools and measures to deal with the multifaceted issue of reverse transfer of technology, they have not led to final agreement on some of the policy approaches that should be pursued on the subject. The views among regional groups diverged mainly on the identification of these approaches, particularly the validity and feasibility of establishing an international labour compensatory facility - and this on both conceptual and operational grounds. The idea of compensation was viewed by one regional group as a pre-judgement of the outcome of studies by experts on the subject. The second main reason, which relates to the first, was that in the view of the same regional group more technical work (statistical, conceptual and empirical) was still required before activating negotiations on policy approaches at the international level, particularly on the question of financing.

B. Assessment through secretariat self-evaluation

1. Centre for Science and Technology for Development

49. Self-evaluation of aspects of subprogramme 1, Science and technology policy issues and options, were scheduled for the biennia 1988-1989 and 1990-1991.

2. United Nations Conference on Trade and Development

50. During the period 1986 to 1988, the UNCTAD secretariat has undertaken, in the context of its management evaluation process, three rounds of internal evaluations covering a total of 22 substantive programmes.

51. The results of those evaluations, together with information on basic features of the internal evaluation system in UNCTAD, which combines self-evaluation by programme managers with internal independent evaluation by the Programme Co-ordination and Evaluation Unit, have been reported annually, for information purposes, to the Trade and Development Board and to its Working Party on the Medium-term Plan and the Programme Budget for review and detailed discussion. A great deal of evaluation material, such as the results of readership surveys and questionnaires distributed at the training programme, is thus available.

52. In programme 2, Transfer of technology, all three subprogrammes of the medium-term plan have been subjected to internal evaluations as described above and the results reported to the Trade and Development Board. The findings and recommendations on these subprogrammes were presented to the Board in 1986 (TD/B/1110) and 1989 (TB/B/1225). For illustrative purposes, the full text presented to the Board concerning subprogramme 2, Legal policies, is reproduced in annex I.

3. Regional commissions

53. In ECA four self-evaluations have been completed, and a report on them given to the ECA Conference of Ministers at its 15th meeting in April 1989 (E/EC/CM.15/32). In the science and technology programme, self-evaluations of subprogramme 1, "Development of policies, machinery and capabilities for science and technology, and subprogramme 2. Development of manpower for science and technology, were scheduled for completion by the end of 1989. A self-evaluation of subprogramme 3, Promotion of regional and interregional co-operation, is scheduled for the biennium 1990-1991.

54. In ECE and ECLAC, no self-evaluations of the science and technology programmes have been completed or are scheduled. In ESCWA self-evaluations of subprogrammes 1 and 2 are scheduled for the biennium 1990-1991.

55. In 1987, the ESCAP secretariat launched a self-evaluation programme; as at the end of 1989, 27 self-evaluations had been completed. In science and technology, self-evaluations of subprogrammes 1 and 2 have been completed, and the third is scheduled for 1990-1991. The major findings were the following:

(a) Subprogramme 1. Institutional and policy infrastructure for science and technology: The delivery of the outputs under the subprogramme assisted member countries to strengthen institutional and policy infrastructure for science and technology. However, the extent of that assistance is difficult to measure. The relevance of its objectives and execution was positively attested to by statements made at the forty-fifth session of the Commission when the five-year implementation of the Tokyo Programme, which includes activities required for strengthening policy and institutional infrastructure, was reviewed;

(b) Subprogramme 2: Strengthening technological capabilities of member countries: The subprogramme has, to a very great extent, achieved its objectives. The immediate beneficiaries of seminars-cum-study-tours, training courses and similar activities considered them to be relevant to their concerns; backstopping had been rendered to the two main regional institutions; and member countries and funding agencies have shown support by recommending follow-up activities and pledging funds. The most serious problems were lack of extrabudgetary resources, difficulties in communication, and lack of timely statistical information.

C. External evaluations

1. Advance Technology Alert System (ATAS) of the Centre for Science and Technology for Development

56. In 1983, the Intergovernmental Committee proposed that the Centre launch ATAS as a pilot project. After four years, ATAS was to be assessed in order to ascertain its usefulness and contribution to developing countries.

57. The ATAS pilot project involved three elements:

(a) A bulletin focusing on new and emerging areas of science and technology and their implications;

(b) A network intended to link other United Nations bodies, non-governmental organizations, institutions and experts in technology assessment in different parts of the world;

(c) Assistance to member States, upon request, in developing a national capability in technology assessment.

58. For the purpose of carrying out the evaluation, the Ministry of Science and Technology and the Institute for Theory, History and Organization of Science (Academy of Sciences) of the German Democratic Republic were hosts to an international workshop on technology assessment and the Advance Technology Alert System (29 to 31 August 1988). The workshop was attended by independent international experts in technology assessment; the Centre provided support services.

59. The objectives suggested to the participants in their review of ATAS activities were:

(a) To scrutinize the choice of themes and the methodology applied;

(b) To review the involvement of the scientific community and of the United Nations system in those activities;

(c) To identify the appropriate "clientele" of the ATAS Bulletin and to indicate whether or not the target groups would be reached by a publication of that nature;

(d) To evaluate the relevance to science and technology policy planning in member States, particularly in developing countries;

(e) To analyse the match between the original intentions of the Vienna Programme of Action, the resolutions of the Intergovernmental Committee, and the implementation of those resolutions through ATAS;

(f) To suggest alternative strategies and methodologies.

60. The findings and recommendations of the workshop were reported to the Intergovernmental Committee at its tenth session in 1989 (see A/CN.11/90). Background substantive papers prepared by the experts are available for review during the in-depth evaluation.

61. Some findings of the workshop were the following:

(a) ATAS Bulletin:

(i) Taking into account the constraints faced in the preparation of the Bulletin, the workshop found the quality to be good;

(ii) The recipients of the Bulletin in member States needed to be more clearly identified;

(iii) Readership of the Bulletin needed expansion;

(iv) The Bulletin should be published at least twice yearly, as originally intended;

(b) The Network:

(i) A more integrated approach to the three components of ATAS (the Bulletin, the network and assistance to member States) was needed;

(ii) In addition to the existing network of individual experts, a network of institutions in the field of technology assessment should be developed, in order to extend the audience;

(iii) ATAS should direct its attention to enhancing the process of networking for co-operation in the field of technology assessment at the subregional, regional and national levels, and could play a co-ordinating role in referring interested persons to other existing networks, both within and outside the United Nations system;

(c) Assistance to member States:

(i) The workshop felt that the Centre should pursue the general approach to advisory assistance;

(ii) Advisory assistance based on individual requests for strengthening the technology assessment capacity in developing countries should utilize the involvement of the entire United Nations system. The role of the Centre should primarily be catalytic and facilitate the institutionalization of technology assessment.

62. The General Assembly, in resolution 44/14 E, took note of the report on ATAS (A/CN.11/90) and decided to continue and further improve the system, to continue to publish the ATAS Bulletin and to entrust the Centre through ATAS, to serve as the focal point for technological assessment within the United Nations system. The Assembly also resolved that the Intergovernmental Committee should choose substantive themes of particular significance with major science and technology dimensions. Moreover, these themes are to be analysed through a technology assessment methodology as a part of the Centre's new functions as focal point for technology assessment within the United Nations system under the umbrella of ATAS. The Intergovernmental Committee, with support from the Centre and the United Nations system and the Technology Alert Network, would thus provide technology assessment to the General Assembly.

2. Research projects executed by the Technology Division of UNCTAD

63. The Swedish Agency for Research Co-operation with Developing Countries (SAREC) has in the past 12 years provided financial support to the UNCTAD Technology Division to undertake research projects in the areas of energy, food and pharmaceuticals, three of the six sectors listed in Conference resolutions 87 (V) and 112 (V) as being of critical importance in the transfer of technology to developing countries.

64. In 1986, an evaluation of research projects financed by SAREC was carried out by independent experts under terms of reference prepared by SAREC, with the view of analysing the extent to which the projects had attained the established objectives. The report was submitted to SAREC in September 1987, together with a related report on research activities in Asian and African countries.

65. Those evaluations are very detailed and assess all aspects of the activities examined, including the organization of UNCTAD research projects, project execution, and follow-up, diffusion and impact. Some of the major findings were the following:

(a) Issues for research in the three sectors were appropriately chosen;

(b) Little consultation took place between the secretariat of UNCTAD and other United Nations agencies during the course of project preparation;

(c) The choice of countries for case studies was appropiate;

(d) The three sectors under evaluation were the object of extensive field work. Within limitations, the research studies and reports had provided not only useful methodologies for the analysis of technology issues, but had also pointed out a variety of policy options and legal instruments;

(e) One of the principal responsibilities of the secretariat was to report back to the countries on the results of its work. The main forums for discussion were the formal intergovernmental working groups and the Committee for Transfer of Technology. Developing country experts were mostly absent from those meetings due to budgetary restrictions. Delegates coming from local diplomatic missions had little feedback from their own countries;

(f) Follow-up was weakly conducted by the secretariat, which rather reacted to individual requests by countries or by other organizations making use of the results of the research work. Projects should contain explicit follow-up activities. Diffusion activities that could be undertaken by the secretariat to improve dissemination include: inviting sabbatical leaves at Geneva of researchers; preparing executive reports separate from the main reports and circulating them among policy makers and researchers on a broader basis; increasing activities by the Advisory Service; preparation and publication of short papers in international periodicals. Additionally, the secretariat could utilize national focal points to disseminate its work. These could be the national organizations in charge of science and technology planning;

(g) The impact of the studies undertaken would not be readily measured as the diffusion process on which it depended tended to be slow by its very nature. In spite of the above, there were indications of the impact obtained from the research work undertaken by the UNCTAD secretariat. Some developing countries had requested further work, in the way of research, advice on specific issues, or the organization of working groups. Also, some United Nations organizations and others outside the system had at times used the reports for training or formulation of policy guidelines. In these cases, such organizations had a high opinion of the secretariat work.

66. Although outside of the scope of the SAREC evaluation, an analysis was made on other ongoing and projected programmes of the UNCTAD secretariat. The SAREC evaluators considered the work of the secretariat on the international code of conduct for the transfer of technology and the reverse transfer of technology to have been outstanding, and stated that the discussions of those two topics had served many developing countries as inputs to their national planning in these areas. The report concluded with some observations on future research. It stated that the topics of new technologies, and the role of research institutes, while appropiate, were the subjects of endless studies, both within and without the United Nations system, and so, unless greater co-ordination and communication was established, overlap and duplication would be unavoidable. Areas of research that could be pursued by the secretariat in the future, in proper co-ordination with other organizations, were technology assimilation; the social impact (in developing countries) of the development and transfer of new technologies and the managerial aspects of technology transfer.

3. Seminars organized in co-operation with UNCTAD

67. At the end of all training seminars organized jointly by the Programme for Development Co-operation at the Helsinki School of Economics and UNCTAD, participants completed a standard evaluation form. These evaluations give detailed

(and generally favourable) assessments of the topics covered, speakers, training material and pre-seminar assignments and provide comments by participants of general problems and proposals for improvement.

D. Books and articles in external professional literature on the United Nations programme on science and technology for development

68. United Nations publications and reports, while primarily intended for use of intergovernmental bodies and policy-makers at the national level, may also be of interest to academics and other professionals and consequently quoted or reviewed in the professional literature and included in specialized bibliographies or cited in books and articles on science and technology for development. United Nations activities on science and technology, such as the negotiation of international agreements, may also be of sufficient interest to researchers and policy analysts to be the subject of articles and books.

69. A preliminary review has been made of the professional literature on United Nations work in science and technology. Annex II contains a bibliography based on searches in two computer files (the External Materials File of the Dag Hammarskjöld Library and the Social Science Citation Index) supplemented by additional citations provided by the Centre and UNCTAD. Most of the items in the bibliography concern the 1979 Vienna Conference or the negotiation of the code of conduct on transfer of technology.

IV. PRELIMINARY FINDINGS AND RECOMMENDATIONS FOR THE IN-DEPTH EVALUATION

A. Preliminary findings

70. Many evaluations and assessments of components of the United Nations major programme on science and technology for development have been conducted in recent years, and the appropriate intergovernmental bodies have drawn conclusions and taken decisions based on these evaluations and assessments. A great deal of pertinent background material, such as responses to questionnaires and case studies, is available for review during the next phase of the in-depth evaluation. The nature of such a review would have to be carefully specified in order to avoid reopening issues that have been dealt with by intergovernmental bodies.

71. The activities and institutions established by the 1979 Conference have had disappointing results:

(a) The United Nations Financing System for Science and Technology failed to achieve its initial target and was eventually terminated and its responsibilities and resources transferred to UNDP at the end of 1986;

(b) The end-of-decade-review of the Vienna Programme of Action concluded that the accomplishments had been far short of the objectives sought, except in a limited number of countries; the high aspirations remained largely unfulfilled;

(c) CPC concluded in 1987 that the Intergovernmental Committee had been unable to fulfill the co-ordinating role assigned to it;

(d) CPC also concluded that co-ordination by the ACC Task Force still needed to be improved, and that most medium-term plans of the organizations of the United Nations system did not make explicit reference tc the Vienna Programme of Action.

72. The Advance Technology Alert System of Centre was given a positive assessment by an external review group in 1988. In addition, the General Assembly decided in resolution 44/14 E to continue ATAS and to expand its functions and scope by entrusting the Centre to serve as the focal point for technological assessment within the United Nations system.

73. Negotiations under the auspices of UNCTAD on the international code of conduct on transfer of technology slowed in the 1980s, and have not yet been completed. However, secretariat servicing of these negotiations has been effective and discussions during the negotiations themselves have been useful to developing countries.

74. The SAREC-funded research projects of UNCTAD were well conducted and have been useful, although dissemination and follow-up was weak. Training seminars were well received by participants.

75. The programmes of ECA, ECE, ECLAC and ESCWA are small. The regional commissions plan to complete self-evaluations of six subprogrammes in science and technology for development by the end of 1991 in addition to the two self-evaluations already completed by ESCAP. In the case of ESCAP, although the exact impact of outputs was difficult to measure, there is evidence that subprogrammes 1 and 2 assisted member countries to strengthen international and policy infrastructure for science and technology, and met needs for training, study tours. The ESCAP programme has attracted the greatest volume of extrabudgetary funding in the major programme and has provided support to regional institutions in the field for many years.

B. Methodological recommendations

76. The following recommendations on the scope and approach to the in-depth evaluation are proposed for the Committee's consideration:

(a) The evaluation should focus on the two central programmes, since they are by far the most extensive and programme 1 is responsible for co-ordination of science and technology programmes in the United Nations system;

(b) The evaluation should also have a regional component consisting of reviews of all self-evaluation studies in the regional commissions and intergovernmental action based on them, which are available at the time the in-depth study is completed. Should the Committee wish to include a more detailed regional component, then programme 6, Science and technology for Asia and the Pacific (ESCAP), the largest regional programme, would be the most suitable;

(c) The period covered should be 1984-1991.

77. The evaluation would then consist of the following elements:

(a) An examination of the reports mentioned in section III should be undertaken in order to formulate a consolidated understanding of the facts and critical problems identified in external assessments, intergovernmental reviews and self-evaluations and to draw overall conclusions from the findings and recommendations of those exercises;

(b) Findings and lessons and recommendations in self-evaluation of regional programmes should be reviewed;

(c) Assessments in professional literature on United Nations activities in science and technology for development, including major initiatives such as the Vienna Programme of Action and the negotiation of a code of conduct for the transfer of technology, should also be reviewed. This would enable the evaluation team to ascertain views from the international scientific community.

78. The preliminary conclusions and recommendations arrived at as a result of the review and analysis proposed above would be supplemented as needed with questionnaires to Governments and other user groups and interviews with delegations in order to fill in gaps of evidence. Those conclusions and recommendations would be examined in relation to the objectives of the medium-term plan in order to determine the relevance, effectiveness and impact of the activities examined.

Notes

1/ Official Records of the General Assembly, Thirty-ninth Session, Supplement No. 38 (A/39/38), para. 364.

2/ Ibid., Forty-second Session, Supplement No. 16 (A/42/16), part one, para. 236.

3/ Ibid., Thirty-seventh Session, Supplement No. 6 (A/37/6 and corrigendum), chap. 20; and ibid., Forty-third Session, Supplement No. 6 (A/43/6), chap. 20.

4/ Report of the United Nations Conference on Science and Technology for Development, Vienna, 20-31 August 1979 (United Nations publication, Sales No. E.79.I.21 and Corr.1 and 2), chap. VII.

5/ See Official Records of the General Assembly, Thirty-fifth Session, Supplement No. 37 (A/35/37), part two, annex.

6/ Ibid., Thirty-seventh Session, Supplement No. 37 (A/37/37) part one, annex I.

7/ Ibid., Thirty-eighth Session, Supplement No. 37 (A/38/37 and corrigendum), part two, annex.

Notes (continued)

8/ Ibid., Forty-fourth Session, Supplement No. 37 (A/44/37), sect. II.

9/ Ibid., Forty-first Session, Supplement No. 37 (A/41/37), sect. II, resolution 6 (VIII).

10/ Ibid., Thirty-ninth Session, Supplement No. 37 (A/39/37), annex.

11/ See the report of the Intergovernmental Group on Transfer of Technology at its first session (Official Records of the Trade and Development Board, Eleventh Session, annexes, agenda item 7, document TD/B.365, annex I).

12/ See Proceedings of the United Nations Conference on Trade and Development, Third Session, vol. I, Report and Annexes (United Nations publication, Sales No. E.73.II.D.4).

13/ Ibid., Fourth Session, vol. I, Report and Annexes (United Nations publication, Sales No. E.76.II.D.10 and corrigendum), in particular Conference resolution 87 (IV).

14/ Ibid., Fifth Session, vol. I, Report and Annexes (United Nations publication, Sales No. E.79.II.D.14).

15/ Ibid., Sixth Session, vol I, Report and Annexes (United Nations publication, Sales No. E.83.II.D.6).

16/ Official Records of the General Assembly, Forty-second Session, Supplement No. 16 (A/42/16), part one, paras. 262-275.

17/ Ibid., Forty-fourth Session, Supplement No. 37 (A/44/37), p. v.

18/ Ibid., Forty-second Session, Supplement No. 16 (A/42/16), para. 269.

ANNEX I

Excerpt from UNCTAD report on programme evaluation (TD/B/1145)

Programme 5. Transfer of technology

Subprogramme 2. Legal policies

Objectives

1. Intergovernmental objectives: to establish general and equitable standards on which to base the relationships among parties to transfer of technology transactions and Governments concerned, taking legitimate interests into consideration and giving due recognition to the special needs of developing countries for the fulfilment of their economic and social development objectives; to facilitate the formulation, adoption and implementation of laws, regulations and related national policies on the transfer of technology, within the framework of restructuring the existing pattern of international scientific and technological relations affecting the transfer and development of technology.

2. General objectives of the secretariat: to initiate and make recommendations and to assist in the implementation of general and consistent international, regional, subregional and national laws, regulations and related policies in the field of transfer and development of technology designed to promote the international flow and development of technology under fair terms and conditions and with opportunities for all members of the international community.

Main areas of activity and outputs

3. The programme elements included: (i) international legal aspects of the transfer of technology; (ii) laws, regulations and policies on the transfer and development of technology; (iii) economic, commercial and developmental aspects of the industrial property system; and (iv) policies and instruments on the promotion and encouragement of technological innovation. The main areas of activity and outputs pertaining to these programme elements included: (i) reports to intergovernmental bodies and technical publications (16); and (ii) substantive servicing of intergovernmental meetings (5).

Resource inputs for 1985-86

4. Regular budget: $547,000 (15.8 per cent of programme total).

Effectiveness of implementation

5. The report lists the following main achievements during the period under review: the secretariat's active and efficient servicing of the negotiations and consultations on a draft international code of conduct on the transfer of technology which helped to bring the United Nations Conference on the code "within a hair's breadth" of agreement; preparation of reports dealing with subjects not covered by other international organizations in the field of law, regulations and

policies on the transfer and development of technology as well as on policies and instruments for technological innovation; preparation of a comprehensive and up-to-date analytical review of current trends in legislation and policies on technology transfer, designed to provide an analytical tool for policy makers; and the effective servicing of the sixth session of the Committee on Transfer of Technology.

6. The subprogramme considers the implementation of its activities to be very effective, with the exception of programme element 2.3 on "Economic, commercial and developmental aspects of the industrial property system". The factors affecting implementation were both internal (over-programming, insufficient assessment of the analytical work involved in the preparation of some reports and lack of resources) and external (lack of consensus among regional groups with regard to the issues covered by programme element 2.3 and limited response from Governments to secretariat requests for information). Flexible intradivisional arrangements have been established in order to overcome the resource problem and to respond to urgent requests by Governments.

7. There has been a deliberate dissemination strategy for the subprogramme's reports and technical publications, involving inter alia the use of the activities undertaken by ASAT. However, the effectiveness of the dissemination process has suffered from deficiencies in the normal channels of distribution. The feedback mechanism has consisted essentially of the monitoring of statements at intergovernmental meetings.

Effectiveness of outcome

8. The report states that the outputs were in conformity with the objectives and the problems addressed as stated in the Medium-term Plan for 1984-89, which remain relevant and valid.

9. The outcome is considered to be effective. The negotiations on the code of conduct, which represent a unique attempt to provide a legal framework for international technological relations, have almost reached their final stage. In the process, standards have been elaborated to guide relations among parties to technology transactions and Governments concerned, criteria have been advanced for the adoption of national laws, the main responsibilities of the parties concerned have been identified and a broad framework for international co-operation, including specific reasons for the special treatment of developing countries, has been agreed to. The texts already agreed and those still under consideration on outstanding issues will continue to influence both national legislation and international discussions on technology transfer.

10. The report notes that the various categories of outputs were closely interconnected and that the effectiveness of one could be expected to have an impact on others. The negotiations on the code of conduct, as well as the studies on national laws, regulations and policies, have led to the adoption by about 30 developing countries of national legislation and policies on technology transfer as well as to the incorporation of related provisions in several international instruments such as the Lomé Convention and the Lagos Plan of Action. The work

undertaken on innovative policies is still at a preliminary stage; it is thus difficult to assess its impact.

11. The reports and technical publications produced were commended by Governments, in particular during the sixth session of the Committee on Transfer of Technology. It was not possible, however, to provide a detailed analysis of end-users' opinions of the quality and usefulness of the reports and technical publications prepared because of the lack of specific comments made.

12. Among the factors affecting the effectiveness of outcome, reference is made to lack of sufficient consensus among regional groups, the deficiencies in the normal channels of distribution resulting in secretariat reports and technical publications not reaching national policy-makers in time, and delays in the starting of official meetings.

Recommendations for follow-up action

13. The report concludes that there is scope to adapt the secretariat's objectives, strategy and activities to the current technological changes and developments and the reactions of Governments to them, without abandoning the longer-term objectives. In this respect, future efforts should focus on an international framework to promote the international flow of technology on fair terms and conditions. Increased attention should be paid to the relationship of technology to trade and, more specifically, to inter-relationships among intellectual property protection, technological change, industrial competitiveness and international trade, so as to reconcile the need for access to technology on fair terms and conditions with the protection of legitimate trading interests. At the micro level, more attention should be paid to specific contractual terms and conditions, and the development of new contractual relationships. Increased emphasis has already been given to policies on technological innovation and development in developing countries, and this trend should be strengthened.

14. The report also makes a number of other recommendations concerning improvements in the dissemination strategy and the feedback mechanism, as well as the establishment of a closer link between research and technical co-operation activities.

ANNEX II

Preliminary bibliography of books and articles pertinent to the evaluation of the major programme on science and technology for development, 1980-1989

A. Programme 1. Science and technology

Anthropology in the United Nations Conference on Science and Technology for Development.
Current Anthropology, 1981, V22, N3, P312-316 (Editorial).

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Indicators of Measurement of Impact of Science and Technology on Socio-Economic Development Objectives - Report of the Panel of Specialists of the United Nations-Advisory-Committee-on-Science-and-Technology-for-Development held in Graz, Austria from 2-7 May 1984.
Scientometrics, 1984, V6, N6, P449-463 (Editorial).

Integration of Science and Technology with Development - Caribbean and Latin-American Problems in the Context of the United Nations Conference on Science and Technology for Development - Thomas, D. B., Wionczek, M. S.
Helfgott, R. B., Journal of Developing Areas, 1980, V14, N2, P282 (Book Review);
International Labour Review, 1981, V120, N4, P528-529 (Book Review);
Muller, J. - Acta Sociologica, 1980, V23, N4, P342-343 (Book Review).

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PROGRAMME QUESTIONS: EVALUATION

In-depth evaluation of the development issues and policies programme: ECA

Progress report of the Secretary-General

SUMMARY

At its twenty-ninth session, the Committee for Programme and Co-ordination requested that "an in-depth evaluation of the programme on development issues and policies of ECA be carried out and submitted to it at its thirty-first session. The Committee also requested the Secretary-General to submit a progress report to it at its thirtieth session" (A/44/16, para. 294). The present progress report contains a review of information and findings already available in United Nations documents and other sources. Particular attention has been paid to existing internal evaluation reports on aspects of the programme, and other recent assessments of it. Methodological proposals are given in the last section of the report.

* E/AC.51/1990/1.

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INTRODUCTION

1. The Committee for Programme and Co-ordination, in reviewing the progress report of the Secretary-General on the in-depth evaluation of the programme on development issues and policies, 1/ recommended that the Economic Commission for Africa (ECA) be the representative regional commission for work carried out at the regional level. In that context the Committee noted that:

> "... the study should enable ECA to establish priorities in its activities to develop a programme of action for providing support to member States in addressing major economic and social problems through regional and subregional co-operation efforts". 2/

2. The report of the Secretary-General on the in-depth evaluation of the programme on development issues and policies 3/ examined the intergovernmental structure for priority setting in the Commission, and compared the priorities established by ECA in programming documents with the implicit priorities determined by decisions made in the course of implementing the programme over the period. Recommendations focused on priorities for the medium-term plan for the period 1992-1997.

3. The Committee for Programme and Co-ordination reviewed the report at its twenty-ninth session and, noting that it was a review of the setting of priorities, requested that an "in-depth evaluation of the programme on development issues and policies of ECA be carried out and submitted to it at its thirty-first session. The Committee also requested the Secretary-General to submit a progress report to it at its thirtieth session on the subject". 4/

4. The present progress report contains a review of information and findings already available in United Nations documents. Particular attention has been paid to existing internal evaluation reports on aspects of the programme, and other recent assessments of it. Methodological proposals are given in the last section of the report.

5. The ECA programme on development issues and policies consists of eight subprogrammes. They are:

Subprogramme 1:	Socio-economic analysis, planning and projections
Subprogramme 2:	Fiscal, monetary and financial issues at the national level
Subprogramme 3:	Least developed countries
Subprogramme 4:	Policies, institutions and technical assistance for economic co-operation
Subprogramme 5:	Education and training for development
Subprogramme 6:	Manpower and employment planning and policies
Subprogramme 7:	Central co-ordination and information exchange services
Subprogramme 8:	National and subregional information and documentation services

6. For the purposes of evaluation these eight subprogrammes can be grouped into four clusters:

(a) Analysis, planning and projections, including least developed, land-locked and island African countries: subprogrammes 1, 2 and 3;

(b) Economic co-operation and integration in Africa: subprogramme 4;

(c) Human resources planning, development and utilization: subprogrammes 5 and 6;

(d) Development information system in Africa: subprogrammes 7 and 8.

I. BACKGROUND

A. Structure and activities of the programme

7. The ECA programme on development issues and policies, under subprogrammes 1, 2 and 3, provides substantive services to the ECA Conference of Ministers and its subsidiary bodies, and prepares the annual Survey of Economic and Social Conditions in Africa, special studies on monetary and financial issues, and studies and reports on aspects of development problems in least developed countries (LDCs), and provides substantive servicing for the meetings of ministers and experts from African LDCs. The programme also undertakes advisory missions, and develops a short-term forecasting system. Data collection missions are often coupled with advisory and technical assistance missions. The programme managers view such missions as essential for maintaining the quality of ECA reports by providing the staff of ECA with an opportunity to interact with counterpart government officials at a professional level.

8. Present ECA subregional activities concentrate on the preparation of reports to the policy organization of the multinational programming and operational centres (MULPOCs) and the preparation of studies and analysis to promote multisectoral integrated development programmes. Strategies in support of subregional economic co-operation and integration are based on agreements negotiated and entered into by member countries of the five MULPOCs. This approach to economic co-operation and integration in subprogramme 4, "Policies, institutions and technical assistance for economic co-operation", stems from the Lagos Plan of Action 5/ but also reflects the emphasis both in the final act of Lagos and subsequent strategies of subregional economic co-operation.

9. The objectives of subprogrammes 5 and 6 are to assist member States in the reappraisal and subsequent development of educational and training policies and programmes and in the formulation and implementation of comprehensive policies and strategies for the establishment of effective systems for planning the development and utilization of human resources. The strategies pursued in both subprogrammes consist of the dissemination of information through technical publications, the holding of training workshops for managers and professionals, the mobilization of resources for training grants and fellowships, advisory services to member States

at their request, and the preparation of analytical studies and policy-oriented reports for expert groups and policy-makers.

10. The main activities under subprogrammes 7 and 8, concerning the Pan African Documentation and Information System (PADIS), involve the maintenance and elaboration of data bases, technical publications derived from them, and support to a network of participating national, subregional and institutional centres.

B. Organizational resources

11. The allocations to subprogrammes as a percentage of the total resources of the programme, and the established posts allocated to it, for the period 1984-1991, are shown in table 1.

Table 1. Structure and resource allocations in the ECA/DIP programme

	1984-1985 a/	1988-1987 b/	1988-1989 c/	1990-1991 c/
	Established professional posts			
Regular budget resources	50	48	46	44
Extrabudgetary resources	3	1	3	2
Total	53	49	49	46
	Percentage of regular budget resources			
Subprogramme 1	21.0	21.8	22.0	32.0
Subprogramme 2	6.5	4.8	5.0	2.0
Subprogramme 3	6.5	6.8	7.0	6.0
Subprogramme 4	52.0	52.1	51.0	48.0
Subprogramme 5	8.0	8.7	7.0	6.0
Subprogramme 6	6.0	5.8	8.0	6.0
Subprogramme 7 d/	N/A	-	-	-
Subprogramme 8 d/	N/A	-	-	-
	100	100	100	100

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a/ Official Records of the General Assembly, Thirty-eighth Session, Supplement No. 6 (A/38/6).

b/ Official Records of the General Assembly, Fortieth Session, Supplement No. 6 (A/40/6).

c/ Official Records of the General Assembly, Forty-fourth Session, Supplement No. 6 (A/44/6/Rev.1).

d/ Funded from extrabudgetary resources; accounted for 100 per cent of extrabudgetary resources for programme in 1990-1991 budget proposals.

12. As is clear from table 1, subprogrammes 1 and 4 have dominated the resource allocations within the programme for the entire plan period, accounting between them for 80 per cent of regular budget resource allocations and all allocations of extrabudgetary resources for the biennium 1990-1991.

II. SURVEY OF EXISTING INFORMATION

A. Recent self-evaluations and assessments

13. The first report on self-evaluation in ECA was submitted in March 1989 to the Conference of Ministers responsible for economic development and planning. 6/ From the entire range of ECA activities, four subprogrammes, including subprogramme 1 of the programme on development issues and policies, were selected for the first set of self-evaluations, after consultations between the Central Evaluation Unit in New York, the Policy and Programme Co-ordination Office of ECA, and the programme managers concerned. Mail questionnaires were used to collect data from the end users for two of the subprogrammes, but the response to these questionnaires was in most cases quite low. Thus, as with the other two subprogrammes for which it was not possible to collect data from end users, the comments and observations of Member States during intergovernmental meetings were the primary evidence available on the response of users. Programme performance reports and other administrative data such as personnel and financial records, as well as the records of the annual reviews of programmes and projects by the Executive Secretary with programme managers were also used as sources of data for the self-evaluations.

14. The schedule of self-evaluations for the subprogrammes of the programme on development issues and policies, which is annexed to the ECA report on self-evaluation, is shown in table 2 below.

15. The evaluation of subprogramme 1 was the only one completed at the time the present report was finalized. However, subprogrammes covering over 85 per cent of regular budget resource use and two thirds of extrabudgetary resources were scheduled for completion by the end of 1989 and will be completed during 1990.

16. The available evaluations and assessments on the ECA programme on development issues and policies are: (a) the examination of priorities in the implementation of the programme in the prior evaluation report reviewed by the Committee for Programme and Co-ordination in 1989, (b) self-evaluation reports, and (c) the special reviews of the MULPOCs (subprogramme 4) and PADIS (subprogrammes 7 and 8). These assessments are discussed below in relation to each of the eight subprogrammes of the medium-term plan for the period 1984-1989.

Table 2. ECA schedule for self-evaluation

Subprogramme	Completed in 1986-1987	To be completed in 1988-1989	Planned for 1990-1991
1. Socio-economic analysis, planning and projections		X	X
2. Fiscal, monetary and financial issues at the national level			X
3. Least developed countries			
4. Policies, institutions and technical assistance for economic co-operation		X	
5. Education and training for development		X	
6. Manpower and employment planning and policies			X
7. Central co-ordination and information exchange services		X	
8. National and subregional information and documentation services			X

Source: E/ECA/CM.15/32, annex.

B. Analysis, planning and projections, including least developed, land-locked and island African countries (subprogrammes 1, 2 and 3)

17. Subprogramme 1, "Socio-economic analysis, planning and projections", is a research-based and technical assistance activity. The elements of the subprogramme included the following activities: technical assistance, economic surveys, forecasting, sectoral planning, review of development plans, development perspectives and economic co-operation.

18. The prior evaluation report's comparative analysis of the priorities designated in the programme budget with those implicit in programme implementation concluded that subprogramme 1 is one of the two subprogrammes with the highest priority. This is consistent with the principal mandate of the Commission of supporting regional intergovernmental deliberations and assisting in the formulation and development of co-ordinated policies as a basis for practical action. The same comparative analysis led to a recommendation that subprogramme 2, "Fiscal, monetary and financial issues at the national level", which was treated in implementation decisions as having a low priority, be incorporated in a revised version of subprogramme 1. Subprogramme 3, "Least developed countries", which provides support to the Conference of Ministers of Least Developed African Countries in their deliberations on the implementation of the Substantial New Programme of Action for the 1980s for the Least Developed Countries, 7/ was to be continued in the next medium-term plan as a separate subprogramme.

19. A self-evaluation of subprogramme 1 was conducted by the ECA Secretariat and the conclusions and recommendations reported to the Commission in March 1989. 8/ The main conclusions of this report were as follows:

(a) Relevance: At the domestic level, the development process has been disrupted by repeated crises, including devastating calamities.

(b) Effectiveness: Most of the outputs and services were produced as programmed and presented to the actual end-users as scheduled and have been disseminated through conferences, workshops and through the mailing list to government agencies, research and development institutions, and international organizations.

(c) Impact: This subprogramme has had a widely-felt impact on economic development planning in Africa. While this cannot be measured with any degree of accuracy, on the whole, there are clear indications as to its usefulness in addressing problems in line with the requirements and the needs of Member States. Apart from the provision of technical assistance, which is of direct benefit to the countries themselves, the other elements under the subprogramme, such as economic surveys, forecasting systems, sectoral planning, the review of development plans, development perspectives, and economic co-operation enabled many countries to review and adopt policy actions relevant to their specific situations. Furthermore, the undertaking of missions to assess socio-economic conditions upon the invitation of the countries concerned, is itself a clear indication of the usefulness of this activity for their planning process. ... The usefulness of short-term forecasting systems as early warning systems was demonstrated by the recent increase in the number of requests from countries for the establishment of such systems.

20. In spite of these positive overall assessments, a number of problems were identified:

(a) Some of the activities were rather sketchy and unbalanced, and the related reports were general in nature and not grounded on empirical findings.

(b) Some of the activities under the subprogramme are carried out on an ad hoc basis with no established procedures to follow up on their application and effects.

(c) Some of the programme elements took more time to implement than originally envisaged and this, in many cases, affected the performance of other programme elements in terms of redeployment of resources. This has been the case when new requests are made from the countries for a specific activity or when new problems arise in the course of the implementation. This is usually the case of programme elements dealing with the establishment of short-term forecasting systems at the country level which involve consecutive missions.

(d) Unreasonable delays in the implementation of some elements are largely accounted for by unforeseen external factors. For example, the implementation of the programme element on multisectoral planning models was deferred for several years because part of the inputs for this activity had to come from the report of a workshop to be financed from extrabudgetary resources.

(e) Experience showed that some programme elements cannot be properly implemented unless preceded by a sufficient number of outputs of other activities. One good example here is the development perspectives study which incorporates analysis of outputs from programmes on food and agriculture, industrial development, other work in development issues and policies (subprogramme 6. "Manpower and employment planning and policies"), natural resources, and international trade and development finance.

(f) More flexibility in programming is required because economic conditions in Africa are changing rapidly and in many cases such changes necessitate the undertaking of supplementary activities in the form of additional outputs.

(g) The programme element on sectoral planning has been affected by poor organization as well as deficiencies in design, in so far as mobilization of extra-budgetary resources are concerned.

(h) The effectiveness of the subprogramme has, to some extent, been affected by the way outputs are distributed to end users. This distribution is done either at meetings or through mailing lists.

21. Recommendations addressing these problems made in the report were considered by the Tenth Meeting of the Technical Preparatory Committee of the Whole and the twenty-fourth session of the Commission/fifteenth session of the Conference of Ministers in April 1989. The Committee and the Commission took note of the report.

C. Policies, institutions and technical assistance for economic co-operation (subprogramme 4)

22. The prior evaluation report concluded from a comparative analysis of the priorities designated in the programme budget with those implicit in programme implementation that subprogramme 4, "Policies, institutions and technical

assistance for economic co-operation", was one of the two subprogrammes with the highest priority.

23. The United Nations Board of Auditors, in its report for the biennium ending 31 December 1987, raised questions about the effectiveness of the MULPOCs, which are part of subprogramme 4. The Board noted as follows:

> "both the programming and the operational activities of MULPOCs are kept at an extremely low level ... The activity of the MULPOCs consists mostly of routine administrative work ... As for operational activities, at present, MULPOCs are not equipped to carry out any meaningful study." 9/

The Board, therefore, strongly recommended that

> "the achievements of the MULPOCs be thoroughly evaluated with a view to deciding whether this experiment should be continued or whether the mandate, number and structure of these centres should be completely reorganized". 10/

The Advisory Committee on Budgetary and Administrative Questions endorsed the Board of Auditor's recommendations. 11/

24. A report on the structure, organization, and operations of the MULPOCs has been prepared pursuant to General Assembly resolution 43/216 of 21 December 1988, in which the Assembly endorsed the recommendations of the Board of Auditors and the Advisory Committee on Administrative and Budgetary Questions. A Review Team was appointed by the Executive Secretary of ECA and the Under-Secretary-General for Administration and Management to evaluate and assess the activities and operations of MULPOCs in the light of the above recommendations. Prof. Samuel K. B. Asante, Head, Department of Development Studies, United Nations Institute for Namibia, Lusaka, Zambia, was the senior member of the team.

25. The terms of reference of the review were as follows:

(a) To examine the original mandate as contained in document E/ECA/CM.8/26 of 8 April 1982 with a view to ascertaining its continued relevance;

(b) To examine the structure and organization with a view to determining their suitability for the execution of the tasks of the MULPOCs, taking into account the recommendations made in the report of the United Nations Board of Auditors as contained in paragraph 14 of document A/43/5;

(c) As a follow-up to the Rwambuya and Said report dated 23 August 1988, to review and report on all aspects of management of the MULPOCs;

(d) To examine adequacy of resources available and make recommendations aimed at strengthening the MULPOCs for a more efficient execution of their mandate;

(e) To investigate the effectiveness of the linkages with ECA substantive and service organizational units;

(f) To examine any other relevant matters pertaining to the efficient and effective operations of the MULPOCs; and

(g) To report not later than 10 March 1989, or as soon as possible thereafter, to the Executive Secretary of ECA and the Under-Secretary-General for Administration and Management.

26. The main findings of the review were that Member States fully appreciate the services rendered by MULPOCs; they want the experiment to be continued but they expect a complete reorganization of this institution. The report proposes a reorganization and a strategy for implementation, monitoring and evaluation.

27. The Conference of Ministers of the Economic Commission for Africa, in its resolution 4 (X), paragraph 4, requested the Secretary-General to ensure that the report of the evaluation mission should first be submitted to the twenty-fifth session of the Commission/sixteenth meeting of the Conference of Ministers for in-depth examination and comments by the ECA Conference of Ministers, which was responsible for creating the MULPOCs, before being transmitted to the General Assembly for its consideration and decision.

D. Education and training for development, and manpower and employment planning and policies (subprogrammes 5 and 6)

28. The prior evaluation report concluded that subprogramme 5, "Education and training for development", was implicitly designated as having low priority in the 1986-1987 budget document but treated as having high priority in implementation decisions. It recommended that subprogramme 5 provide a framework for ECA's analysis and assessment of human resources policies, which are included in the Programme of Action as one of the high priority areas, that this subprogramme be also designated as a high priority subprogramme, and that subprogramme 6, "Manpower and employment planning and policies", which was treated as having low priority in implementation decisions, be incorporated in the revised version of subprogramme 5. The ECA plans the merger of the two subprogrammes, as a single subprogramme on "human services development planning and utilization", in the 1992-1997 medium-term plan.

E. Central co-ordination and information exchange services, and national and subregional information and documentation services (subprogrammes 7 and 8)

29. Subprogrammes 7 and 8 are based on a project funded by the United Nations Development Programme (UNDP), the Pan-African Documentation and Information System (PADIS), first established in 1980 as an ECA-executed technical co-operation project.

30. In 1986, UNDP approved $US 3 million for PADIS for a further five years following a review and evaluation of PADIS activities over the previous five years. The major emphasis of the approved PADIS project for 1987-1991 is on:

(a) Strengthening of the central co-ordination office of ECA in order to increase its capacity to deliver advisory services to Member States;

(b) Identification and strengthening of national information and documentation centres;

(c) Establishment and strengthening of PADIS subregional information and documentation centres, which as they develop will provide technical and advisory services to emerging national centres.

31. The Board of Auditors, after reviewing the PADIS work programme for 1986-1987, observed that it was based on grossly overestimated extrabudgetary resources and recommended that

> "a complete reappraisal of PADIS be undertaken with a view to clarifying the delineation between its administrative electronic data-processing objectives within ECA and its technical assistance objectives, scaling down its goals, focusing such activities on a limited number of actions, apportioning activities between PADIS and programmes carried out by a United Nations specialized agency on the one hand and PADIS on the other". 12/

As also noted in the previous evaluation report, the implementation rate of subprogramme 8 reflected the scaling down of the programmed technical assistance outputs in the light of shortfalls in resources and the lack of fit between project schedule of project outputs and the programmed outputs in the 1986-1987 budget. In the recently concluded biennium, 1988-1989, subprogrammes 7 and 8 recorded a much higher than average implementation rate (98.6 per cent) reflecting a close fit between extrabudgetary resources and the schedule of project and programmed outputs. The 1990-1991 programme budget also reflects a more realistic level of programming.

32. The General Assembly, the Advisory Committee on Administrative and Budgetary Questions and the Committee for Programme and Co-ordination endorsed the recommendation of the Board of Auditors that a complete reappraisal of PADIS be carried out.

33. The UNDP plans to complete an evaluation of the PADIS project during 1990. The purpose of the planned evaluation is to provide an assessment of the performance of this project during the present phase. More specifically, the evaluation will focus on the design of the project, its implementation, its achievements as well as the future orientation of the project during the remaining years of the Fourth Cycle, and the conditions that should prevail in order for the project to attain its objective, taking into account the staff situation. The evaluation will also examine the organizational status of PADIS and the sustainability of the project beyond 1991, in terms of mobilizing resources from all sources, including the regular budget of the United Nations.

34. In its medium-term plan for the 1992-1997 period, ECA proposes to replace the two earlier subprogrammes in the 1984-1991 medium-term plan with a single subprogramme on the Development Information System. The objective of this is to

enhance the capability of member States to collect, store, retrieve and disseminate information on African development. Under this general objective, specific objectives are to develop and maintain a series of numeric and non-numeric data bases for storage and dissemination of development information to be used for the exchange of information with member States, to train personnel from member States in computerized development information management, to assist member States, subregional and regional institutions in the introduction and utilization of up-to-date methods of development information processing and dissemination and to develop and encourage acceptance of norms and standards for harmonization of development documentation and information.

35. As the results of the UNDP evaluation of the PADIS project become available, it will be possible to more clearly delineate the technical assistance objectives of PADIS and the substantive activities on the Development Information System carried out under the regular programme budgets.

III. PRELIMINARY FINDINGS AND RECOMMENDATIONS FOR THE IN-DEPTH EVALUATION

A. Preliminary findings

36. Activities in the ECA programme on development issues and policies have been subject to considerable review and evaluation in recent years. The previous evaluation report reviewed the priorities of the programme at the subprogramme level. Since then ECA has conducted a self-evaluation of subprogramme 1, the findings and recommendations of which were reviewed in 1989 by the Technical Preparatory Comittee of the Whole, the Conference of Ministers and the Commission. The results of the assessment of subprogramme 4 described above will be submitted to the Commission at its next session in 1990. In addition, during 1990 the UNDP will complete an evaluation of subprogrammes 7and 8, concerning the PADIS project, and its results will form the basis of further UNDP decisions on PADIS. The General Assembly, in part B (VIII) of its resolution 44/201 of 21 December 1989, decided to establish the post of Chief of Automation Services in the 1990-1991 regular programme budget of ECA, thereby shifting funding of some electronic data-processing services from the extrabudgetary funds provided to ECA for PADIS.

37. Intergovernmental bodies of the Commission and the organs of the General Assembly have thus recently conducted assessments of activities accounting for 80 per cent of regular budgetary expenditures and all extrabudgetary expenditures of this programme.

B. Methodological recommendations

38. Further evaluation of the ECA programme on development issues and policies could best consist of an examination of the implementation of recent recommendations and intergovernmental decisions. It is proposed that this examination be included in the triennial review of the development issues and policies programme to be submitted to the Committee for Programme and Co-ordination at its thirty-first session in 1991.

39. Should the Committee for Programme and Co-ordination consider it useful, the triennial review could also include a review of the external professional literature assessing the results of ECA initiatives on development issues endorsed by the General Assembly, especially the Lagos Plan of Action and the United Nations Programme of Action for African Economic Recovery and Development. 13/

Notes

1/ E/AC.51/1987/6.

2/ Official Records of the General Assembly, Forty-second Session, Supplement No. 16 (A/42/16), para. 239.

3/ E/AC.51/1989/4/Add.2 and Corr.1.

4/ Official Records of the General Assembly, Forty-fourth Session, Supplement No. 16 (A/44/16), para. 294.

5/ A/S-11/14, annex I.

6/ E/ECA/CM.15/32.

7/ Report of the United Nations Conference on the Least Developed Countries, Paris, 1-14 September 1981 (United Nations publication, Sales No. E.82.I.8), part one, sect. A.

8/ E/ECA/CM.15/32, paras. 33-56.

9/ Official Records of the General Assembly, Forty-third Session, Supplement No. 5 (A/43/5), vol. I, para. 90.

10/ Ibid., para. 91.

11/ Report of the Advisory Committee on Administrative and Budgetary Questions (A/43/674 and Corr.1), para. 13.

12/ Official Records of the General Assembly, Forty-third Session, Supplement No. 5 (A/44/5), vol. I, para. 180.

13/ General Assembly resolution S-13/2, annex.

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